

REMARKS

The Amendments

Claim 1 is amended to incorporate the substance of claim 4 and to clarify that the fluoropolymer particles partially or totally coat the electrically conductive particles, as supported by the disclosure at page 5, lines 27-29; and page 8, lines 1-2. The full terms for "PVDF" (polyvinylidene fluoride) and "VF2" (vinylidene fluoride) are provided in the amended claim; see page 7, lines 1-13, and the attached excerpt from Concise Encyclopedia Chemistry (1994). Claim 7 is amended to correct an obvious typographical error. Support for the new dependent claims is found, for example, in the specification at page 6, lines 9-11; page 6, lines 13-17; page 7, lines 21-24; and page 7, lines 28-29.

To the extent that the amendments avoid the prior art or for other reasons related to patentability, competitors are warned that the amendments are not intended to and do not limit the scope of equivalents which may be asserted on subject matter outside the literal scope of any patented claims but not anticipated or rendered obvious by the prior art or otherwise unpatentable to applicants. Applicants reserve the right to file one or more continuing and/or divisional applications directed to any subject matter disclosed in the application which has been canceled by any of the above amendments.

The Restriction Requirement

The restriction requirement was maintained and made Final and the Office Action alleges that applicants' grounds for traversal were considered. However, the record is clear that applicants' arguments were not considered. The Office Action states that applicants' "traversal was on the ground(s) that applicant reserves the right to file the non-elected claims as divisional application/s." But it should be evident from the Response to the Restriction

Requirement filed July 18, 2003, that these were not applicants' reasons for traversal and that the actual reasons for traversal have been ignored. Applicant did state that they reserved the right to file one or more divisional applications, but this is clearly not a reason for traversing the restriction. Applicants stated that the reasons for traversal were provided below and those reasons are obviously the ones provided in the following paragraph. Those reasons are repeated here:

“Applicants agree that inventions I and II are related as combination-subcombination. Applicants disagree, however, that the bipolar plate of claims 11-15 does not require the particulars of the microcomposite powder. Claims 11-15 are dependent claims which ultimately depend from claim 1. They require a microcomposite powder exactly as recited in claim 1. As shown in the examples, the microcomposite powder is pressed to make bipolar plates, for example. A bipolar plate or other article made from a material different from the powder of claims would not be within the literal scope of claims 11-15. Thus, the basis for the restriction is incorrect and the restriction between Groups I and II should be withdrawn.

As to the restriction of Group III, the method of making, from Groups I and II, applicants urge that this restriction also be withdrawn. Applicants urge that they are entitled to examination of one method of making invention together with the product claims. The method of making claim should thus be examined or be rejoined with the product claims upon a finding of allowance of the product claims.

Regarding the Election of Species requirement, because Groups I and II should be examined together, applicants will make an election of species, even though they have elected Group I. Applicants elect the species of the bipolar plates. However, it is believed that the search of the underlying microcomposite powder will encompass either of the bipolar plate or supercapacitor uses. Thus, all species of the claims should be examined together since there is no additional search burden to include all species.”

These arguments in traversal of the restriction requirement are completely unaddressed. They should be fully considered and, in light thereof, the restriction requirement should be withdrawn.

The Rejection under 35 U.S.C. § 103 over Bevers in view of Braun

The rejection of claims 1-3, 5-6 and 10 under 35 U.S.C. § 103, as being obvious over Bevers (U.S. Patent No. 5,738,905) in view of Braun (U.S. Patent No. 4,554,063) is respectfully traversed.

It is believed that this rejection is rendered moot since claim 4 was not subject to this rejection and the substance of claim 4 is now incorporated into the sole independent claim 1. Bevers does not disclose or suggest a powder containing PVDF particles. Further, it does not disclose a fluoropolymer which partially or totally coats the electrically conductive particles. Braun teaches nothing regarding fluoropolymer particles and, thus, does not make up for the failure of Bevers to teach or suggest the claimed invention. Braun teaches the use of fluoropolymers (see, e.g., col. 3, lines 48-61) but only as a binder not as particles for coating electrically conductive particles. Thus, the rejection under 35 U.S.C. § 103 over Bevers in view of Braun should be withdrawn.

The Rejections under 35 U.S.C. § 102 and § 103 over Kelly alone or in view of Nishimura or Chu

The rejection of claims 1-4 under 35 U.S.C. § 102(e), as being anticipated by Kelly (U.S. Patent No. 6,298,209) and the rejection of claims 1-4 and 7-10 under 35 U.S.C. § 103 as being obvious over Kelly in view of Nishimura (U.S. Patent No. 6,103,373) or Chu (U.S. Patent No. 5,789,108) are respectfully traversed.

Kelly discloses an electrostatically coated electrode wire for a hybrid scavengeless developer unit. The coating for the wire makes use of small sized particles, preferably 1 μm or less, in a crosslinkable polymer. Other polymer components can also be added. See, e.g., col. 5, line 41, to col. 6, line 4. In Example 2, Kelly combines polyurethane particles, carbon black particles and Kynar[®], polyvinylidene fluoride, particles to provide a coating mixture.

The example states that the Envirocron/carbon black composite from example 1 and the Kynar[®] particles are physically mixed into a homogeneous mixture.

Kelly does not disclose in Example 2 – or otherwise disclose or suggest in its disclosure – that the polyvinylidene fluoride particles either partially or totally coat the electrically conductive particles or are otherwise adhered to the electrically conductive particles. To the contrary, Kelly makes clear in Example 1 that the polyurethane and carbon black particles are melt-mixed and then ground in a fluidized bed grinder to obtain particles of the composite, whereas, in Example 2, Kelly makes clear that the polyvinylidene fluoride, Kynar[®], particles are merely “physically mixed” with the composite particles from Example 1. There is no teaching in Kelly which would suggest that the polyvinylidene fluoride, Kynar[®], particles would be or would be desired to be coated upon the composite particles. To the contrary, the objectives of Kelly would suggest otherwise. In Kelly, it is critical that the mixture be retained in a powder form which can be electrostatically coated onto a wire; see col. 11, lines 16-22. One of ordinary skill in the art may expect that Kelly requires and desires the powders to be merely separate particles, as inferred by their preparation by mere “physically mixing,” rather than agglomerations or coatings. Thus, nothing in Kelly teaches or suggests coating of the electrically conductive particles by the polyvinylidene fluoride. For this reason, at least, the rejection under 35 U.S.C. § 102 should be withdrawn.

Nishimura and Chu were cited for their teachings regarding alleged obviousness of providing PEG and/or carbon fibers into the powder compositions of Kelly. For the reasons discussed above, even if such a combination were made, such combination would not result in or suggest applicants’ invention. The polyvinylidene fluoride would still not be coated on the electrically conductive particles. Nishimura and Chu also fail to independently teach or

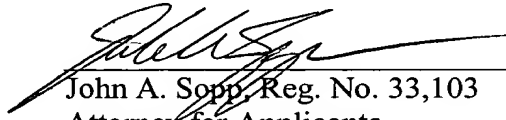
suggest polyvinylidene fluoride particles for coating electrically conductive particles according to the claimed invention.

For all of the above reasons, it is submitted that the combined teachings of references, considered as a whole, fail to suggest the claimed invention to one of ordinary skill in the art and the rejection under 35 U.S.C. § 103 should be withdrawn.

It is submitted that the claims are in condition for allowance. However, the Examiner is kindly invited to contact the undersigned to discuss any unresolved matters.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,



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